

(b) contacting said messenger RNAs with a plurality of first oligodeoxythymidylate-containing primers to form a plurality of first-strand complementary DNAs, wherein said first-strand complementary DNAs are generated by reverse transcription of said messenger RNAs with extension of said first primers;

(c) permitting terminal extension of said first-strand complementary DNAs to form a plurality of polynucleotide-tailed first-strand complementary DNAs, wherein said polynucleotide-tailed first-strand complementary DNAs are tailed by multiple copies of deoxynucleotides;

(d) incubating denatured said polynucleotide-tailed first-strand complementary DNAs with a plurality of second primers to form a plurality of double-stranded complementary DNAs, wherein said double-stranded complementary DNAs are generated by extension of DNA polymerase activity with said second primers;

(e) permitting transcription of said double-stranded complementary DNAs to form a plurality of amplified RNAs, wherein said amplified RNAs are generated by extension of RNA polymerase activity through the promoter region of said double-stranded complementary DNAs; and

(f) contacting said amplified RNAs with said first primer sequences to form a plurality of said polynucleotide-tailed first-strand complementary DNAs, wherein said polynucleotide-tailed first-strand complementary DNAs are generated by reverse transcription of said amplified RNAs with extension of said first primer sequences.

Claim 8 (amended). The method as defined in Claim 7, wherein said enzyme activity is performed at temperature ranged from about 55°C to about 75°C for Tth-like DNA polymerases with reverse transcription activity.

Claim 9 (amended). The method as defined in Claim 7, wherein said first primer sequences are complementary to the tails of said messenger RNAs for the extension of reverse transcription activity in the claim 7.

Claim 10 (amended). The method as defined in Claim 9, wherein said first primer sequences are coupled to an RNA polymerase promoter and contain about eight to about thirty copies of deoxythymidylates.

C8
Claim 12 (amended). The method as defined in Claim 1, wherein said DNA polymerase activity is an enzyme activity selected from the group consisting of E. coli DNA polymerase 1, Klenow fragment of E. coli DNA polymerase 1, T4 DNA polymerase, Taq DNA polymerase, Pwo DNA polymerase, Pfu DNA polymerase and Tth-like DNA polymerases, C. therm. Polymerase.

C9
Claim 16 (amended). The method as defined in Claim 15, wherein said RNA polymerase promoter is selected from the group consisting of T3, T7, SP6 and M13 RNA polymerase promoter.

Claim 17 (amended). The method as defined in Claim 1, wherein said transcription is an RNA polymerase activity selected from the group consisting of T3, T7, SP6 and M13 RNA polymerase.

C10
Claim 30 (amended). The method as defined in Claim 22, wherein said RNA polymerase promoter is selected from the group consisting of T3, T7, SP6 and M13 RNA polymerase promoter.

C11
Claim 33 (amended). The method as defined in Claim 32, wherein said mixed polymerase activities are selected from the group consisting of T3, T7, SP6, M13 RNA polymerases and Tth-like DNA polymerases with reverse transcriptase activity, C. therm. polymerase.